

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (original) Method for manufacturing multiple channel membranes, wherein a solution of a polymer which forms a semi-permeable membrane after coagulation, is extruded through an extrusion nozzle wherein several hollow needles are arranged, a gas containing coagulating vapour or a coagulating liquid is injected through the hollow needles into the extruded material during extrusion, so that parallel continuous channels extending in extrusion direction are formed in the extruded material, and the outer surface of the membrane is brought into contact with coagulation agents characterized in that the outer surface of the membrane after it leaves the extrusion nozzle is first brought into contact with a mild coagulation agent such that the shape of the membrane is fixed without an active layer being formed on the outer surface of the membrane and subsequently the membrane is brought into contact with a strong coagulation agent.

2. (original) Method according to claim 1, wherein the mild coagulation agent is water vapour.

3. (previously presented) Method according to claim 1,
wherein the mild coagulation agent is a liquid which is applied
on the extruded material by means of an additional outlet on the
circumference of the extrusion nozzle.

4. (previously presented) Method according to claim 1,
further comprising providing a separating layer by coating on the
surface of the membrane in the channels.

5. (previously presented) Method according to claim 1,
wherein the extrusion nozzle at the circumference is provided
with elevated portions, so that a membrane having recessed
portions in the outer circumference extending in the extrusion
direction, is obtained.

6-8. (cancelled).

9. (previously presented) Spiral-wound filtration
element, comprising:

one or more multiple channel membranes produced by the
method according to claim 1,

each membrane in the form of a surface with channel-
free recessed portions extending parallel to the channels,

the membranes wound around a central axis and having the channels running in the direction of the axis of the winding, wherein,

an active layer is arranged in the channels,
no active layer is provided on an outer surface, and
any resistance against liquid flows is predominantly determined by the active layer.

10. (canceled).

11. (previously presented) Method according to claim 2, further comprising providing a separating layer by coating on the surface of the membrane in the channels.

12. (previously presented) Method according to claim 3, further comprising providing a separating layer by coating on the surface of the membrane in the channels.

13. (previously presented) Method according to claim 2, wherein the extrusion nozzle at the circumference is provided with elevated portions, so that a membrane having recessed portions in the outer circumference extending in the extrusion direction, is obtained.

14. (previously presented) Method according to claim 3, wherein the extrusion nozzle at the circumference is provided with elevated portions, so that a membrane has recessed portions in the outer circumference extending in the extrusion direction, is obtained.

15. (previously presented) Method according to claim 4, wherein the extrusion nozzle at the circumference is provided with elevated portions, so that a membrane having recessed portions in the outer circumference extending in the extrusion direction, is obtained.

16-20. (cancelled).

21. (previously presented) Method according to claim 1, wherein the hollow needles are arranged within a circular extrusion nozzle so that a cylindrical multiple channel semi-permeable membrane is formed.

22. (previously presented) Method according to claim 21, wherein four or more hollow needles are arranged within the circular extrusion nozzle.

23. (previously presented) Method according to claim 1,
wherein the needles are arranged in a row within a rectangular
nozzle so that a flat sheet membrane is formed.

24. (previously presented) Method according to claim 5,
wherein the needles are arranged in a row within a rectangular
nozzle so that a flat sheet membrane having recessed portion
without channels extending parallel to the channels is formed.

25. (previously presented) Method according to claim
24, further comprising the step of winding the flat sheet
membrane spirally round a central axis and placing the wound
membrane in a housing, to produce a spiral-wound membrane.